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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/612,691 07/10/00 CARDENAS-GRANGUILLHOME E 204,688

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IM52/0627

EXAMINER

LAWRENCE JR, F	
ART UNIT	PAPER NUMBER

1724

DATE MAILED:

06/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/612,691

Applicant(s)

CARDENAS-GRANGUILLHOME
ET AL.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION

Priority

1. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. _____" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Mexico on August 26, 1997. It is noted, however, that applicant has not filed a certified copy of the Mexican application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 is vague because the phrase "it is promoted" does not clearly describe what is being promoted.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al. (4,543,189; col. 1, lines 5-19; col. 2, lines 20-34; col. 3, lines 29-43; col. 4, lines 19-26).

7. Rice et al. ('189) disclose a process for removing complexed zinc-cyanide from steel plant furnace blowdown water comprising adding waste pickling liquor that contains hydrochloric acid and at least 250-400 ppm (g/l) of ferrous chloride to cause a slow precipitation of contaminants that is allowed to settle or is filtered. The slow precipitation meets the purifying flocculus of the claims.

8. The instant claims differ from the disclosure of Rice et al. ('189) in that the ferrous chloride is hexahydrated and that specific amounts of reagent are added. It is submitted that the pickling liquor of the Rice et al. patent will contain hexahydrated ferrous chloride because of the inherent presence of water in the liquor. Absent a proper showing of criticality or unexpected results, one having ordinary skill in the art at the time of the invention would have used routine experimentation to determine an optimal level of treatment based on the extent of contaminant reduction per reagent volume addition versus the cost of adding an excess. The implied process steps of claim 1 including "to promote the denaturalization of protein" are not positively recited and do not define over the process disclosed by Rice et al.


Conclusion

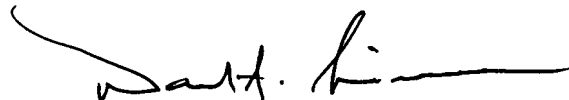
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to the Japanese abstract (JP 59-26191 A) discloses a method for treating water comprising the addition of a ferrous salt with base to form a floc which absorbs organic compounds from the water. The reference to the Japanese abstract (JP 53-65263 A) discloses a process for simultaneously treating acid and alkali pickling waste solution and electroplating waste solution by causing flocculation and neutralization. The reference to the Soviet Union patent (SU 372,180; abstract) discloses a process for purifying industrial wastewater with the addition of spent pickling solution containing acid and ferrous compounds with pH adjustment to flocculate dispersed contaminants. The reference to the Japanese abstract (JP 58-19498) discloses a process for treating zinc and nickel containing waste water comprising adding ferrous ions from a pickling solution. The reference to the Japanese abstract (JP 50-117256) discloses a process for the flocculation of proteins in waste water comprising adding ferrous salts. The reference to Tenny (4,419,247; abstract; col. 1, line 65 to col. 2, line 14; col. 3, lines 31-39; col. 4, lines 14-17) discloses a method for removing soluble sulfide residue and organic compounds from industrial waste water comprising adding waste pickle liquor containing ferrous chloride and hydrochloric acid and clarifying the water by coprecipitation. The reference to Sakakibara (4,169,053; abstract; col. 5, lines 36-44) discloses a process for removing compounds of heavy metals from waste water using ferrous ions from a spent pickling solution. The reference to the Japanese abstract (JP 2000301160 A) discloses a process for treating oil-containing waste water comprising adding pickling waste but does not qualify as prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 703-305-0585. The examiner can normally be reached on Mon-Thurs 7:30-5:00; alternate Fridays 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on 703-305-1972. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

fl 
June 25, 2001



David A. Simmons
Supervisory Patent Examiner
Technology Center 1700